



EAG-9F Installation & Operation Manual

9000 Lbs. Capacity Two-Post Lift EAG-9F



**READ THIS MANUAL BEFORE INSTALLING OR OPERATING THE LIFT.
INSPECT THE LIFT UPON DELIVERY. NOTE ANY DAMAGE ON DELIVERY RECEIPT.**

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PLEASE READ THE ENTIRE MANUAL BEFORE ANY INSTALLATION AND OPERATION OF LIFT.

PRODUCT DESCRIPTION

The EAG-9F is a 2-post base plate, leaf chain driven lift, **9000 lbs. capacity.**

The safety latch system is very similar to an extension ladder. The safety latch is in contact with the rack as the lift ascends and drops into place as the lift rises. Safety latch engages in rack in 3" (76mm) increments at about 16" (406mm) from the ground. The locking latch must be manually disengaged for the lift to descend. The latch is released by pulling the release cable raising the latch up off the latch rack. Once the raise button is pressed, the latch will automatically re-engage after approximately 3" (76mm) of travel. Heavy bearings and heavy-duty leaf chains are used throughout the lift. The work is done with the heavy-duty chain connected to a 2.5" (63mm) cylinder, driven by a hydraulic pump capable of providing 3,000 PSI (207bar).

Please read the safety procedures and operation instructions in this manual before operating the lift. Proper installation is very important. Keep this operation manual near the machine at all times. Make sure ALL USERS read and fully understand this manual. To minimize the chance of making an error in installation, please read this manual carefully before beginning installation. Check with the building owner and/or architect's building plans when applicable. The lift should be installed on a relatively level floor with 4" (101mm), 3,000 PSI (207bar) concrete that has sufficiently cured.

This is a vehicle lift installation/operation manual and no attempt is made or implied herein to instruct the user in lifting methods particular to an individual application. Rather, the contents of this manual are intended as a basis for operation and maintenance of the unit as it stands alone or as it is intended and anticipated to be used in conjunction with other equipment.

Proper application of the equipment described herein is limited to the parameters detailed in the specifications and the uses set forth in the descriptive passages. Any other proposed application of this equipment should be documented and submitted in writing to Eagle Equipment for review. The user assumes full responsibility for any equipment damage, personal injury, or alteration of the equipment described in this manual or any subsequent damages.

TERMS AND CONDITIONS

Please read these terms of service carefully. Standard Tools and Equipment Co.'s policy.

These terms and conditions of sale ("Agreement") are applicable to any order placed by you (the "Customer") with and accepted by Equipment Co. (referred to herein as "EAGLE"). The **terms of service** are rules that our customer and EAGLE agree to abide by prior to doing business together.

Payment Methods

EAGLE

accepts Visa, MasterCard, American Express and Discover. Orders may also be prepaid with money order, wire transfer, cash, PayPal, Tele check, and personal or company check. When paying with personal or company check, funds must be collected in advance of shipment. Your credit card will be authorized at time of order and charged at time of shipment. There will be a deposit required prior to any work on a custom booth order. If paying this deposit with a credit card, it will be charged at the time of order with the remainder charged at the time of shipment.

Tax

EAGLE charges tax for all applicable orders, There are exceptions to this requirement as have been established by the NC Dept. of Revenue. In order to comply with the laws of North Carolina, we are required to have a completed and signed form E-595E from each customer who is sales tax exempt.

We may request a copy of your Resale Certificate issued by your state Dept. of Revenue.

Risk of Loss / Freight / Shipping

All shipments are FOB the EAGLE warehouses, which means that ***ownerships of these goods transfers to the customer when they leave our dock.*** We use common carriers that have a demonstrated history of timely deliveries and competitive freight rates for the benefit of our customer. Most of these carriers have restrictions on delivering to residential addresses and may require pick-up at freight terminal. There are additional fees for residential, limited access and remote delivery. There are additional fees for lift gate services and scheduled deliveries from the freight carriers.

For items advertised with "Free Shipping"; this applies only to shipments within the Continental United States (excludes Alaska, Hawaii, and Canada and Mexico). Free Freight does not apply to residential, limited access and remote delivery locations. Call the EAGLE sales department at 1-800-336-2776 for a specific freight quote.

Delivery, Unloading and Freight Damage

Unloading: The customer is responsible for unloading the shipment from the carrier's truck. This may require a forklift and/or lift gate service. Please note that Lifts will require a forklift to unload and they cannot be unloaded using a lift gate vehicle. The EAGLE customer care team can advise you prior to

shipping what will be needed to unload your shipment and the approximate weight of the shipment.

Tracking: While EAGLE will provide customers with an estimated time of delivery and tracking information, we can't provide a specific time, or schedule a time for that service. The customer can contact the freight carrier directly to schedule a delivery or check on freight delivery status.

Damages: Any charges or damages that may be incurred as a result of unloading from the carrier's truck is the customer's responsibility. Depending on your situation, it may be advantageous to have your products shipped to a freight terminal where the freight company's personnel can load it onto your trailer or truck. Please note that Lifts will require a fork lift to unload and they cannot be unloaded using a lift gate vehicle.

Upon delivery, it is very important that you inspect all of your products immediately. While we make every attempt to prevent freight damage by properly packaging your order, sometimes damage occurs in transit. For your protection, it is imperative that you note any and all damage you observe on the Delivery Receipt (Bill of Lading) that the carrier will ask you to sign. This will establish your right to file a claim against the freight carrier for this damage. If there are notable shipping damages to your equipment at time of delivery, we advise that you deny the shipment and note "Arrived Damaged" on the Bill of Lading. We also advise that you take photos of the damage for your freight claim with the freight carrier. The carrier will then return the damaged equipment to their warehouse for inspection. You are then advised to contact EAGLE concerning your damaged shipment.

If there are concealed damages after the carrier has departed (something you hadn't noted on your initial inspection), this should be reported to the freight company **within three days of delivery** in order to preserve your right to file a claim. It is the customer's responsibility to file damage claims against the freight company. EAGLE customer care team is here to assist with the claim if we are contacted within the 3-day window.

Shortages: Should you discover any shortages/missing parts, we ask that they be reported to EAGLE's customer service **within 3 days of delivery.**

Lost Shipment: If your shipment is lost in transit, we ask that you report it to EAGLE customer care as soon as possible so that we may work with the freight company to try and resolve it on your behalf. We cannot ship you a replacement product until your lost shipment is resolved (found or the claim is closed) by the freight company.

Pickup Order

Requirements: It's important to call EAGLE before you plan to arrive to pickup your order so that we can ensure your order is in stock and ready for you to pickup. We can only offer pickup at our warehouse Monday-Friday from 8:30AM – 4:00PM. It is required that you have the appropriate trailer or vehicles for us to load your equipment. We will not load a lift into a pickup truck. The equipment must fit securely and be on a trailer or proper weight limitations. We can advise you of the proper pickup trailer and vehicle prior to you arriving.

Installation

EAGLE

has a nationwide network of independent installers that we can recommend for your Equipment

These installers do not work for EAGLE. Please call 1-800-336-2776 to find an installer in your area. The contract you enter into with the independent installer is outside the relationship you have with EAGLE and we are not responsible for issues or damages that you may incur with the independent installer.

Warranties, Returns and Replacements

All products that appear on our websites or in our catalogs are warranted by , Eagle Equipment™ or the manufacturer against defects in material and workmanship to the extent of the manufacturer's warranty. Please note that we provide a warranty on parts only and this doesn't extend to labor, loss of product use, or loss of business revenue and profits. Contact our customer care department for specific warranty details on products and models.

In the event that you suspect you have a defective part or product ("part"), please contact our customer care department immediately by calling 336-697-7177,

Please include photos and video of the defective equipment for your claim.

If we believe that you have received a defective part, EAGLE will provide you with a return authorization ("RA") number and schedule a time to have your equipment picked up. It is the customer's responsibility to package the equipment for return shipment in sufficient packaging to prevent damage during return. Please note the EAGLE RA number on the packaging.

Upon receiving and inspecting the defective part, EAGLE will provide a replacement part, free of charge to the customer. If the customer wishes to have the warranty replacement shipped to them prior to the

return of the defective product, the customer must pay for the replacement product at shipping. EAGLE will issue the Customer a refund upon receiving the defective product.

In the event the part is determined to not be defective, it will be subject to a minimum restocking fee of 20% and the return freight. Credit for warranty returns to third party vendors will be subject to their return policy.

Returns

All returns must be authorized prior to shipping. Contact EAGLE's customer care department for instructions and a return authorization number, which must be issued prior to any return.

Customers may return any unused stock item in the original packaging within 30 days of purchase subject to a 20% restocking fee. All freight charges related to the original shipment and the return will be the responsibility of the customer.

Custom manufactured items are not returnable and no credit will be given on unauthorized returns. **Shipments refused by customers and returned to EAGLE will be treated as unauthorized returns.** Credit will be subject to restocking charges and freight charges related to the return.

Product Availability / Pricing

EAGLE

strives to maintain sufficient inventory on all catalog products to ensure prompt delivery. However,

due to high sales volume, some products may be temporarily out of stock. EAGLE will make every effort to process your order in a timely fashion, but EAGLE will not be liable due to the unavailability of inventory or delays in shipping.

Graphics both online and in print are for illustration only and product shipped may vary than those depicted due to improvements, changes by the manufacturer, or other reasons. EAGLE makes every effort to provide accurate product images and specifications. All product prices and the terms and conditions of sale are subject to change by EAGLE at any time without notice.

**INSPECT YOUR LIFT UPON DELIVERY.
NOTE ANY DAMAGE ON DELIVERY RECEIPT.**

SHIPPING AND DAMAGE CLAIMS

All shipments must be inspected immediately upon receipt. For your protection, any external damage must be noted on the bill of lading at the time of delivery in order to qualify for a claim against the freight carrier.

Concealed damage must be reported to the freight company within three (3) days of delivery. It is the customer's responsibility to file for damage claims against the freight company. Eagle Equipment is not responsible for loss or damages caused by shipping.

Shortages or missing parts must be reported to Eagle Equipment Customer Service (1-800-336-2776) within three (3) days of delivery.

INTRODUCTION

Thank you for your purchase.

Your lift is the result of decades of research, testing, and development; and represents the most advanced technology on the market.

The care with which you maintain and operate your lift will directly affect its overall performance and longevity.

BE SAFE.

Your lift was designed and built with safety in mind. However, safety relies on proper training and thoughtful use on the part of the operator. **DO NOT** operate or repair this equipment without reading this manual and the important safety instructions shown inside.

Keep these instructions accessible, and make sure that **ALL USERS** read this manual.

**PLEASE READ THIS MANUAL IN ITS ENTIRETY BEFORE
INSTALLING OR OPERATING THIS LIFT.**

RECORD THE MODEL NUMBER AND THE SERIAL NUMBER

This information is located on the main post of your lift.

Model Number:_____

Serial Number:_____

Manufacturing Date:_____

**THIS INFORMATION WILL BE REQUIRED
SHOULD YOU EVER NEED TO CALL IN FOR
PARTS OR TECHNICAL ASSISTANCE**

For parts assistance, please call: 1-800-535-0016

WARNING:

**Failure to follow the unpacking and assembly directions may cause personal injury and/or impair the operation of this machine.
PLEASE READ THOROUGHLY.**

UNPACKING

1. Your lift comes packaged as a single unit. A fork-lift, floor-jack or other heavy-lifting equipment may be necessary to separate the components. Exercise caution when disassembling the packaged lift, as shifting may have occurred during shipping.
2. Carefully remove the shipping bands and brackets from the lift. Check for any obvious shipping damage. Remember to report any shipping damage to the carrier and make a notation on the delivery receipt. Save all bolts, nuts and washers securing the shipping brackets, as these may be used in the assembly of the lift.
3. The unit is composed of several main components.
4. An accessory box is included with the lift and contains smaller components.
5. Unstrap and remove the power unit box from the packaged lift. Literature such as the installation manual, warranty card, and serial number plate is included inside this box. Inspect the power unit and note any possible shipping damage on the shipping bill.



Shipments must be inspected immediately upon receipt.

External damage must be noted on the bill of lading.

Concealed damages must be reported to the freight company within three days of delivery.

Shortages must be reported to Eagle Equipment within three days of delivery:

1-800-336-2776.

IMPORTANT SAFETY INSTRUCTIONS

READ THESE SAFETY INSTRUCTIONS THOROUGHLY

1. Read and understand all operation and safety warning procedures before operating the lift.
2. Keep hands and feet clear. Remove hands and feet from any moving parts. Keep feet clear of lift when lowering. Avoid pinch points.
3. Keep work area clean. Cluttered work areas invite injuries. Consider work area environment. Do not expose equipment to rain. Do not use in damp or wet locations. Keep area well lit.
4. Only trained personnel should operate this lift. All non-trained personnel should be kept away from the work area. Never let non-trained personnel come in contact with or operate the lift.
5. Use the lift correctly. Never use lifting adapters other than those provided by the manufacturer, in any manner other than intended. Only use the vehicle manufacturer's recommended lift points.
6. Do not override self-closing manuals. Do not overload the lift. Load capacity is indicated on lift nameplate.
7. Remain clear of lift when raising or lowering vehicle. Clear area if vehicle is in danger of falling.
8. After positioning the vehicle, apply the parking break. Make sure the vehicle doors are closed during raising and lowering cycles. Do not allow anyone on the lift or inside the raised vehicle.
9. Always ensure that the safeties are engaged before any attempt is made to work on or near vehicle. After raising the vehicle briefly, stop and check the pad adapters for secure contact. Always lift vehicle using all four adapters.
10. Use caution when removing or installing heavy components (center-of-gravity displacement).
11. Dress properly. Non-skid, steel-toe foot-wear and safety glasses is recommended when operating lift.
12. Guard against electric shock. This lift must be grounded while in use to protect the operator from electric shock. Never connect the ground wire to a live terminal. This is for ground only.
13. **DANGER:** The power unit used on this lift contains high voltage. Disconnect power at the receptacle before performing any electrical repairs. Secure plug so that it cannot be accidentally plugged in during service.
14. **WARNING:** Risk of explosion. This equipment has internal arcing or sparking parts which should not be exposed to flammable vapors. This machine should not be located in a recessed area or below floor level.
15. Maintain with care. Keep lift clean for better and safer performance. Follow manual for proper lubrication and maintenance instructions. Keep control handles and/or buttons dry, clean and free from grease and oil. Protect all parts of the electrical equipment from humidity and moisture.
16. Carefully inspect the lift on a regular basis. Perform maintenance according to the maintenance schedule.
17. Check for damaged parts. Check alignment of moving parts, breakage of parts or any condition that may affect its operation. Do not use lift if any component is broken or damaged.
18. Never remove safety related components from the lift. Do not use the lift if safety related components are damaged or missing.
19. Stay alert. Watch what you are doing. Use common sense. Be aware.

Working temperatures:

1. Ambient temperature: 41-104 degrees Fahrenheit
2. Humidity: 30-95%
3. Transportation/storage temperature: 77-131 degrees Fahrenheit, not exceeding 24 hours at up to 158 degrees Fahrenheit
4. Installation altitude max: 3280 feet (1000m)

PREPARATION

- Hoist or Forklift (optional)
- Two 10' to 12' step ladders
- ISO 32 Light Hydraulic Oil (approx. 12 quarts)
- Tape Measure
- 4' Level
- Rotary Hammer Drill with 3/4 in. Drill Bit (Core Drill Rebar Cutter recommended)
- Metric Sockets and Open Wrench set
- Vise grips
- Torque wrench with 1-1/8" socket for anchors
- 8mm Socket Head Wrench
- Teflon Tape

GENERAL INFORMATION

1. Identify the components and check for shortages. If shortages are discovered, contact us immediately. Save the shipping bolts for use in the installation.
2. Lift location - check with building owner and/or architect's building plans when applicable. The lift should be located on a relatively level floor with 4" (101mm) 3,000 PSI (207bar) concrete sufficiently cured with no cracks within 36" (914mm) and no seams within 6" (152mm) of the base plate. Remember any structure is only as strong as the foundation on which it is located.

Check for ceiling clearance (lifting height plus vehicle height if installing the base plate lift). Check for clearance in the front and rear of vehicle when on lift - will the garage door open.

Basic Specifications

Model	Capacity	Lifting Time	Overall Height	Overall Width	Between Posts
EAG-9F	9000 lbs.	60 Sec	111.5"	134.5"	110"

Please refer to Fig 1 for the lift relevant parameters.

IMPORTANT CONCRETE AND ANCHORING INFORMATION

1. Concrete should have compression strength of at least 3,000 PSI (207bar) and a minimum thickness of 4" (101mm) in order to achieve a minimum anchor embedment of 3.2" (82mm). When using the standard supplied nineteen (19) 5.5" (140mm) long anchors, if the top of the anchor exceeds 57" above the floor grade, you DO NOT have enough embedment. Please refer Fig 3.
2. Before drilling .75" (19mm) diameter holes in concrete floor, use the holes in the column base plate as a guide. Make sure the hole distance from the edge is not less than 7.8" (200mm). Hole to hole spacing should not be less than 7.87" (165mm) in any direction. Concrete thickness or hole depth should be a minimum of 4.5" (114mm).
3. **CAUTION.** DO NOT install on asphalt or other similar unstable surface. Columns are supported only by anchoring in the floor.
4. Shim each column base until each column is plumb. If one column has to be elevated to match the plane of the other column, full size base shim plates should be used (Reference Shim Kit). Torque anchors to 203N-m/s. Shim thickness MUST NOT exceed .5" (13mm) when using the 5.5" (140mm) long anchors provided with the lift. Adjust the column extensions plumb.
5. If anchors do not tighten to 203N-m/s. Installation torque, replace concrete under each column base with a 48" (1219mm) x 48" (1219mm) x 6" (152mm) thick 3,000 PSI (207bar) minimum concrete pad keyed under and flush with the top of existing floor. Let concrete cure before installing lifts and anchors.

ANCHORING TIPS

1. Use a concrete hammer drill with a carbide tip, solid drill bit the same diameter as the anchor .75" (19mm). Do not use excessively worn bits or bits which have been incorrectly sharpened.
2. Keep the drill in a perpendicular line while drilling.
3. Let the drill do the work. Do not apply excessive pressure. Lift the drill up and down occasionally to remove residue to reduce binding.
4. Drill the hole to depth equal to the length of anchor.
5. For better holding power blow dust from the hole.
6. Place a flat washer and hex nut over threaded end of anchor, leaving approximately .5" of thread exposed carefully tap anchor. Do not damage threads. Tap anchor into the concrete until nut and three turns on average concrete (28-day cure). If the concrete is very hard only one or two turns may be required.

INSTALLATION INSTRUCTIONS

PLEASE READ INSTRUCTIONS BEFORE OPERATING THE LIFT. Please refer to Fig 2.

- STEP 1: After unloading the lift, place it near the intended installation location.
- STEP 2: Remove the shipping bands and packing materials from the unit.
- STEP 3: Remove the packing brackets and bolts holding the two columns together (do not discard bolts, they are used in the assembly of the lift)
- STEP 4: Once the power unit column location is decided, ensure that the proper lift placement is observed from walls and obstacles. Also check the ceiling height for clearance in this location. Note the power unit column can be located on either side. It is helpful to try and locate the power side with the passenger side of the vehicle when loaded on the lift to save steps during operation.
- STEP 5: Base plate lift has columns only, no uprights.
- STEP 6: Position the columns facing each other 134.5" outside the base plates.
- STEP 7: Using a .75" (19mm) concrete drill, drill the anchor holes in the main side column, installing anchors as you go (see fig 3). Use a block of wood or rubber mallet to drive anchor bolts in. Drill to a minimum depth of 4" (101mm) to ensure maximum holding power. Drilling through concrete (recommended) will allow the anchor to be driven through the bottom if the threads are damaged.
- STEP 8: Using a level, check column for side-to-side plumb and front-to-back plumb. Use .75" (19mm) washers or shim stock, placing shims as close as possible to the hole locations. This will prevent bending the column bottom plates. Tighten .75" (19mm) anchor bolts to 143 lbs (65Kgs).
- STEP 9: Using a measuring tape, measure from the back corner of the base on main side column to the opposite back corner of the offside column to insure legs are square.
- STEP 10: After the overhead beam is assembled, drill and anchor offside column as described in steps 7 and 8.
- STEP 11: Installing the equalizing cables: refer to Fig 4 and Fig 5 for general cable arrangement for the lift. Set carriages on the second safety latch engagement. Be sure each carriage is at the same height by measuring from the top of the base to the bottom of the carriage (double check the latches before working under the carriages). This dimension should be within .23" (6mm). Run first cable Fig 4. Tighten nut on one cable stud so that the end of stud passes the nylon on the nut. Pull the other end of cable and run nut on it. Tighten both nuts. Repeat above for second cable.
- STEP 12: Connecting the hydraulic hoses, as shown on Fig 6 for base plate type.
- STEP 13: Mount the floor plate as show in Fig 6.
- STEP 14: Install the swing arms on the carriages using the included 1.5" (38mm) diameter pins. Check for proper engagement of the arm lock- the rack on the lock should fully engage the gear on the arm.
- STEP 15: Adjust the carriage cables tension. Adjust each cable to approximately .5" (13mm) side-to-side play. Check the latch releases to insure the carriage is still sitting on the appropriate latch.
- STEP 16: Remove the vent plug from the power unit and fill the reservoir. Use a Ten Weight (SAE-10) non-foaming, non-detergent hydraulic fluid (Texaco HD46 or equal). The unit will hold twelve quarts of fluid.

STEP 17: Make the electrical hookup to the power unit. 220V Single Phase. It is recommended that a 220 Volt, 30 Amp twist lock plug be installed in the power line just ahead of the power unit. Size wire for 30-amp circuit.

WARNING: The wiring must comply with local code. Have a certified electrician make the electrical hook-up to the power unit. Protect each circuit with time delay fuse or circuit breaker 208v.230v single Phase. 60 Hz 30 Amps. Motor cannot run on 50 Hz without a physical change to motor.

STEP 18: **Do not place any vehicle on the lift at this time.** Cycle the lift up and down several times to insure latches click together and all air is removed from the system. To lower the lift, latch releases must be manually released. Latches will automatically reset once the lift ascends approximately 17" (432mm) from base. If latches click out of sync, tighten the cable on the one that clicks first.

RAISING THE LIFT

Press button on power unit

Lock- The latch mechanism will 'trip over' when the lift raises and drop into each latch stop. But, to lock the lift you must press the Lower lever to relieve the hydraulic pressure and let the latch set tight in a lock position.

Always lock the lift before going under the vehicle. Never allow anyone to go under the lift when raising or lowering. Read the safety procedures in the manual.

Note: It is normal for an empty lift to lower slowly - it may be necessary to add weight.

LOWERING THE LIFT

1. Raise the lift until the latch clears.
2. Pull both latch releases **WARNING: Always Release Both Sides**
3. Press the lever at the power unit to lower the lift.

SAFETY PROCEDURES

- Never allow unauthorized persons to operate lift. Thoroughly train new employees in the use and care of lift.
- CAUTION: The power unit operates at high pressure.
- Remove passengers before raising vehicle.
- Prohibit unauthorized persons from being in shop area while lift is in use.
- Total lift capacity is 9000 lbs. with 2,250 lbs. per arm pad.
- Prior to lifting vehicle, walk around the lift and check for any objects that might interfere with the operation of lift and safety latches: tools, air hoses, shop equipment.
- When approaching the lift with a vehicle, center the vehicle between the columns so that the tires will clear the swing arms easily. Slowly drive the vehicle up between the posts. Have someone outside the vehicle guide the driver.
- Always lift vehicle using all four arms.
- Never use lift to raise one end or one side of vehicle.
- Raise vehicles about 36" (914mm) and check stability by rocking.
- Prior to lowering vehicle, walk around the lift and check for any objects that might interfere with the operation of lift and safety latches; tools, air hoses, shop equipment. Swing the arms out of the path and slowly drive the vehicle out. Have someone outside the vehicle guide the driver.

**ALWAYS LOCK THE LIFT BEFORE GOING UNDER THE VEHICLE.
NEVER ALLOW ANYONE TO GO UNDER THE LIFT WHEN RAISING OR LOWERING.**

MAINTENANCE SCHEDULE

WARNING: USERS SHOULD ALWAYS INSPECT LIFTING EQUIPMENT AT THE START OF EVERY SHIFT. THESE AND OTHER PERIODIC INSPECTIONS ARE THE RESPONSIBILITY OF THE USER.

The following periodic maintenance is the suggested minimum requirements and minimum intervals; accumulated hours or monthly period, which ever comes sooner. If you hear a noise or see any indication of impending failure, cease operation immediately and inspect, correct and/or replace parts as required.

DAILY PRE-OPERATION CHECKS (8 HOURS)

The user should perform daily checks. **ATTENTION!** Daily checks of the safety latch system is very important. Preventative checks could save you from expensive property damage, lost production time, serious personal injury and even death

- Check safety locks audibly and visually while in operation
- Check safety latches for free movement and full engagement with rack
- Check hydraulic connections, and hoses for leakage
- Check chain connections - bends, cracks, and looseness
- Check cables connections - bends, cracks, and looseness
- Check for frayed cables in both raised and lowered position

- Check snap rings at all rollers and sheaves
- Check bolts, nuts, and screws and tighten
- Check wiring and switches for damage
- Keep base plate free of dirt, grease or any other corrosive substances
- Check floor for stress cracks near anchor bolts
- Check swing arm restraints

WEEKLY MAINTENANCE CHECKS (40 HOURS)

- Check anchor bolts torque to (N-m/s) for the .75" (19mm) anchor bolts • Do not use impact wrench
- Check floor for stress cracks near anchor bolts
- Check hydraulic oil level
- Check and tighten bolts and nuts, and screws
- Check cylinder puller assembly for free movement or excessive wear on cylinder yoke or pulley pin
- Check cable pulley for free movement and excessive wear

YEARLY MAINTENANCE CHECKS

- Lubricate chain
- Grease rub blocks and column surface contacting rub blocks
- Change the hydraulic fluid, good maintenance procedure makes it mandatory to keep hydraulic fluid clean. Operating temperature, type of service, contamination levels, filtration, and chemical composition of fluid should be considered. If operating in a dusty environment, a shorter interval may be required.

The following items should only be performed by a trained maintenance expert:

- Replace hydraulic hoses
- Replace chains and rollers
- Replace cables and sheaves
- Replace or rebuild air and hydraulic cylinders as required
- Replace or rebuild pumps / motors as required
- Check hydraulic and air cylinder rod and rod end (threads) for deformation or damage
- Check cylinder mount for looseness and damage

Relocating or changing components may cause problems. Each component in the system must be compatible; an undersized or restricted line will cause a drop in pressure. All valve, pump, and hose connections should be sealed and/or capped until just prior to use. Air hoses can be used to clean fittings and other components. However, the air supply must be filtered and dry to prevent contamination. Most important - cleanliness - contamination is the most frequent cause of malfunction or failure of hydraulic equipment.

TROUBLE SHOOTING

1. Motor does not run:
 - A. A breaker or fuse has blown.
 - B. Motor thermal overload tripped. Wait for overload to cool.
 - C. Faulty wiring connections, call electrician.
 - D. Defective up button, call electrician for checking.
2. Motor runs but will not rise:
 - A. An obstruction is under check valve. Push handle down and push the up button at the same time. Hold for 10-15 seconds. This should flush the system.
 - B. Check the clearance between the plunger valve of the lowering handle. There should be .05" (1.5mm).
 - C. Remove the check valve cover and clean ball and seat.
 - D. Oil level is too low. Oil level should be just under the vent cap port when the lift is down!
3. Oil blows out breather of power unit:
 - A. Oil reservoir overfilled.
 - B. Lift lowered too quickly while under a heavy load.
4. Motor hums and will not run:
 - A. Impeller fan cover is dented. Take off and straighten.
 - B. Faulty wiring: call electrician
 - C. Bad capacitor: call electrician
 - D. Low voltage: call electrician
 - E. Lift overloaded
5. Lift jerks going up and down: Air in hydraulic system. Raise lift all the way to top and return to floor; repeat 4-6 times. Do not let this overheat power unit.
6. Oil leaks:
 - A. Power unit: if the power unit leaks hydraulic oil around the tank-mounting flange; check the oil level in the tank. The level should be two inches below the flange of the tank. Check with a screwdriver.
 - B. Rod end of the cylinder: the rod seal of the cylinder is out. Rebuild or replace the cylinder.
 - C. Breather end of the cylinder: the piston seal of the cylinder is out. Rebuild or replace the cylinder.
7. Lift makes excessive noise:
 - A. Leg of the lift is dry and requires grease.
 - B. Cylinder pulley assembly or cable pulley assembly is not moving freely.
 - C. May have excessive wear on pins or cylinder yoke.

OWNER/EMPLOYER RESPONSIBILITIES

The owner/employer:

Shall establish procedures to periodically maintain, inspect and care for the lift in accordance with the manufacturer's recommended procedures to ensure it's continued safe operations.

Shall provide necessary lockout/tag outs of energy sources per ANSI Z244.1-1982 before beginning any lift repairs.

Shall not modify the lift in any manner without prior written consent of the manufacturer.

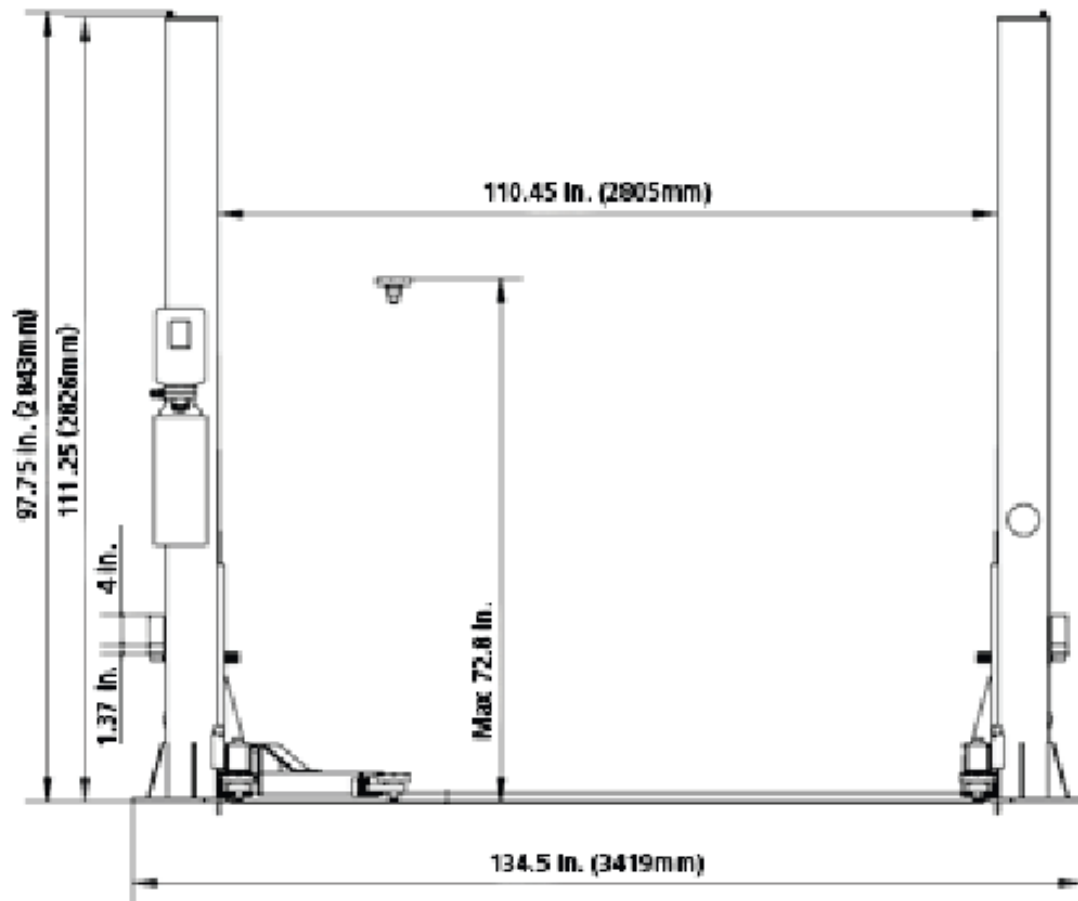
Shall display the operating instructions and "Lifting It Right" and "Safety Tips" supplied with the lift in a conspicuous location in the lift area convenient to the operator.

Shall insure that lift operators are instructed in the proper and safe use and operation of the lift using the manufacturer's instructions and "Lifting It Right" and "Safety Tips" supplied with the lift.

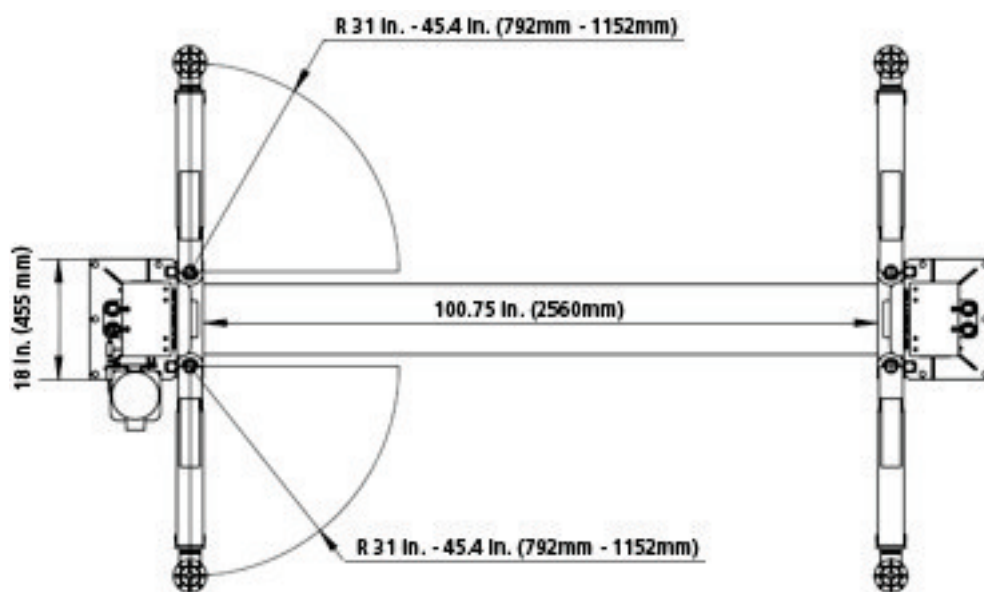
SPECIFICATIONS

EAG-9F	
Style	Asymmetric
Lifting capacity	9000 lbs.
Overall height	111.5"
Overall width (outside of base plates)	134.5"
Width (outside of columns)	124.75"
Inside columns	110"
Front arm min reach	31.5"
Front arm max reach	44.75
Rear arm min reach	31.5"
Rear arm max reach	44.75
Min pad height	5"
Height adapters	1.75"-4"
Rise	69.5"
Lifting height max (pad only)	72.8"
Lifting height max (with adapters)	80.75"
Drive-through clearance	101"
Time to full rise (no load)	60 secs
Anchoring	.75"
Concrete grade min.	C20/25(DIN 1045:2001-07)
Motor power	2HP (1.5KW)
Power supply	220V/380V,50Hz/60Hz
Shipping weight	1400 lbs. (548 kg)
Shipping dimensions	113"L x 19"W x 29"H

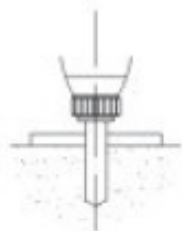
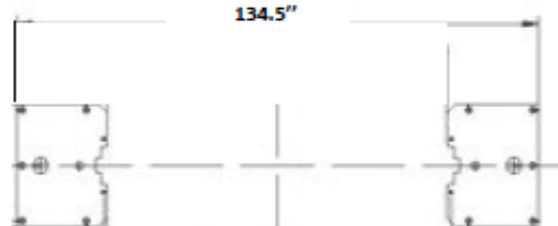
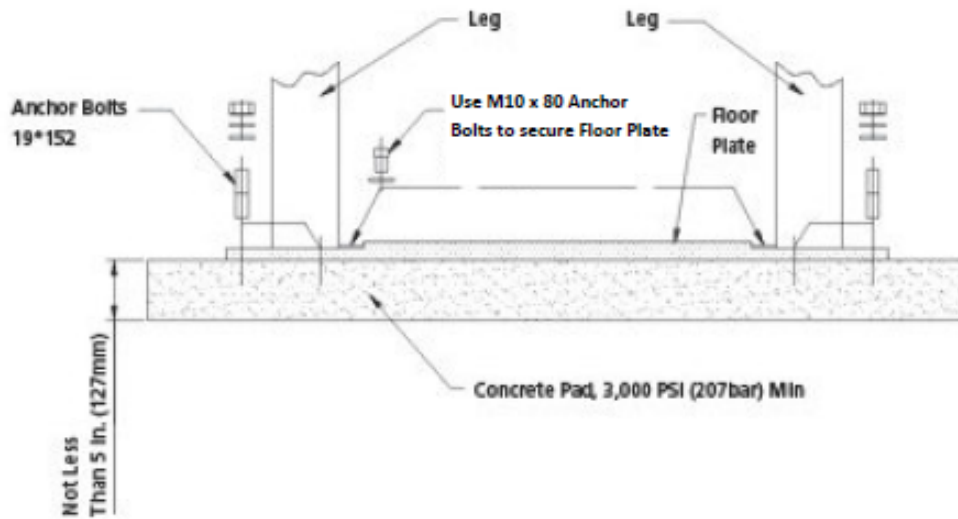
INSTALLATION INSTRUCTION: FIGURE 1



INSTALLATION INSTRUCTION: FIGURE 2



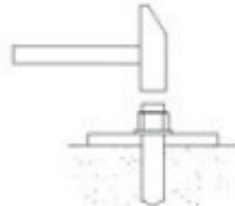
INSTALLATION INSTRUCTION: FIGURE 3



Drill
.75 in. (19mm)



Clean



Run nut down
Drive anchor down



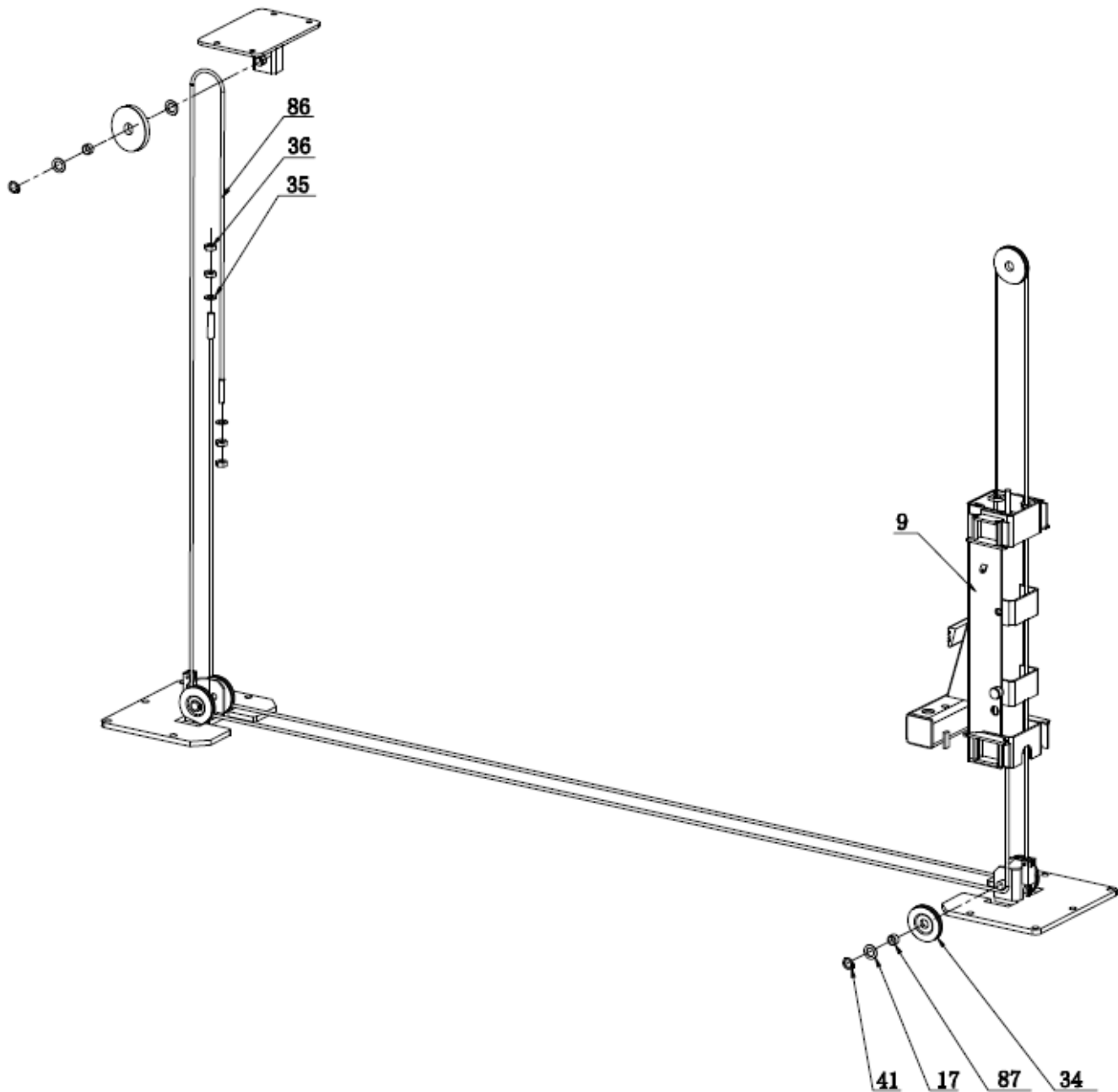
Tighten nut

INSTALLATION INSTRUCTION: FIGURE 5A

Installing the equalizing cables: for general cable arrangement. Route the

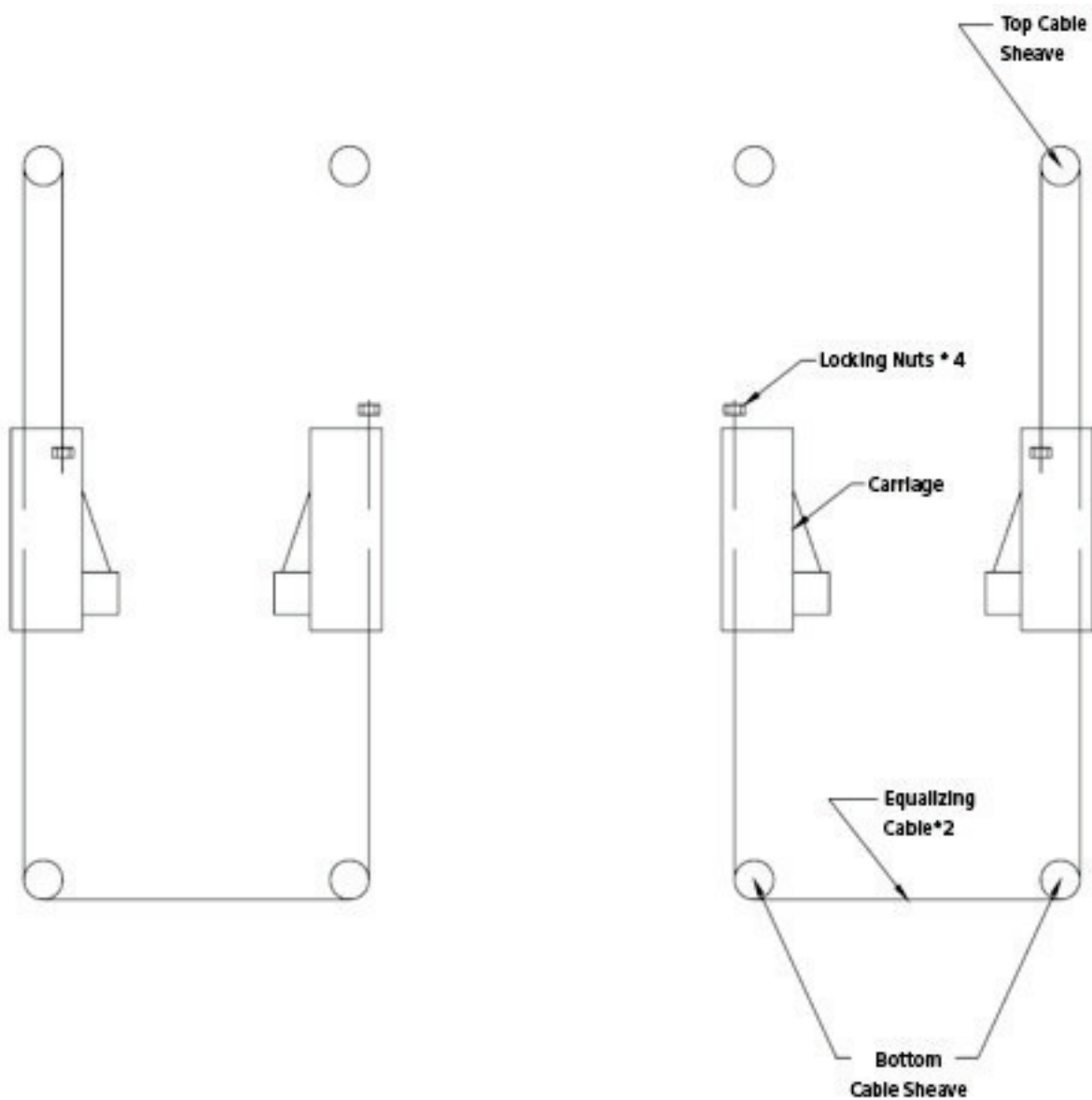
as shown Tighten nut on one cable stud so that the end of stud passes the nylon on the nut. Pull the other end of cable and run nut on it. Repeat above for second cable.

NOTE: DO NOT tighten cables at this time. Just start them on the threads. Other column will be anchored in later steps. If you tighten cables at this time you will pull the column and be unable to properly level/shim it for anchor installation.



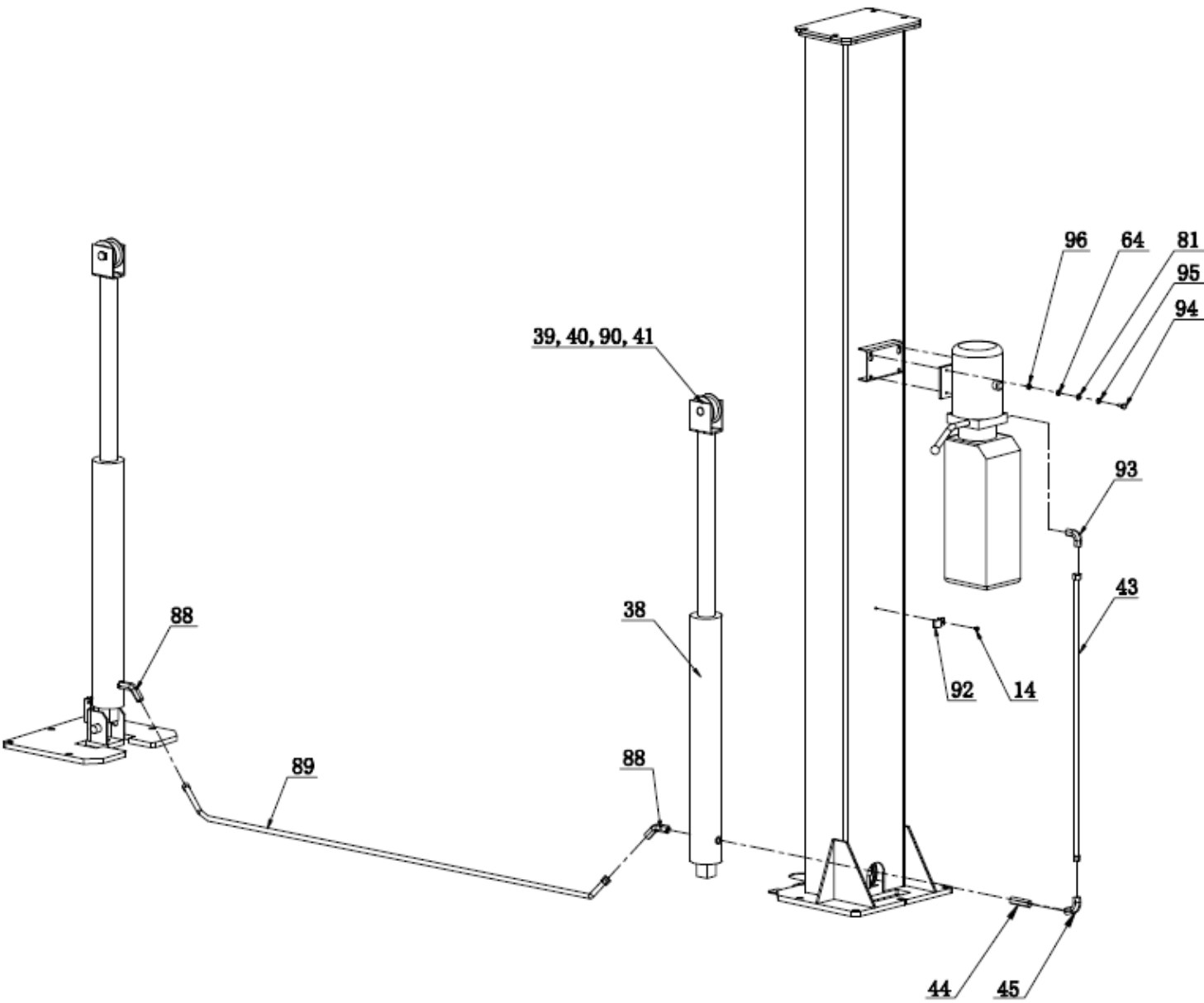
Note: Always try to keep two cables at the same tension.

INSTALLATION INSTRUCTION: FIGURE 5B

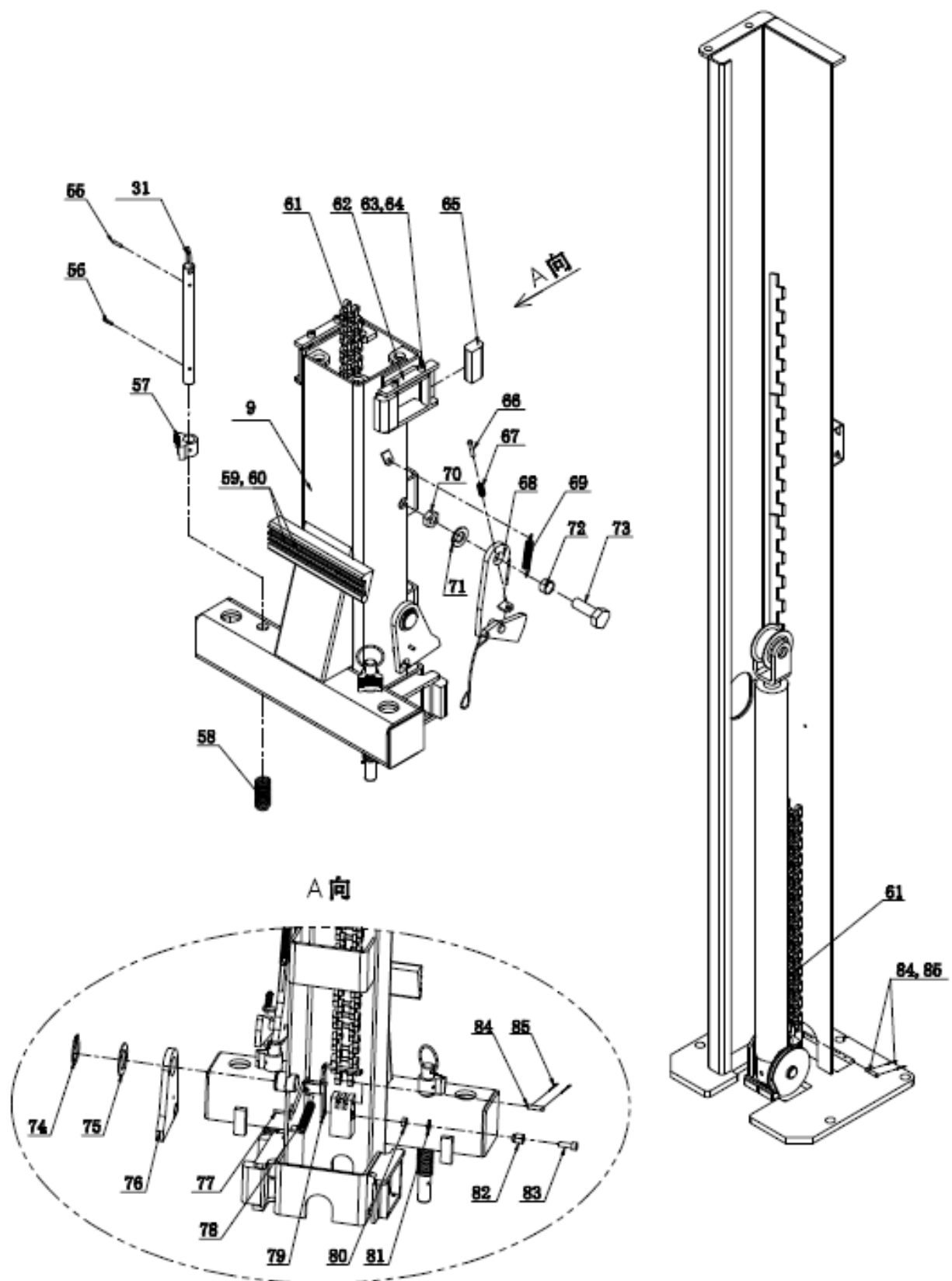


Note: Always try to keep two cables at the same tension.

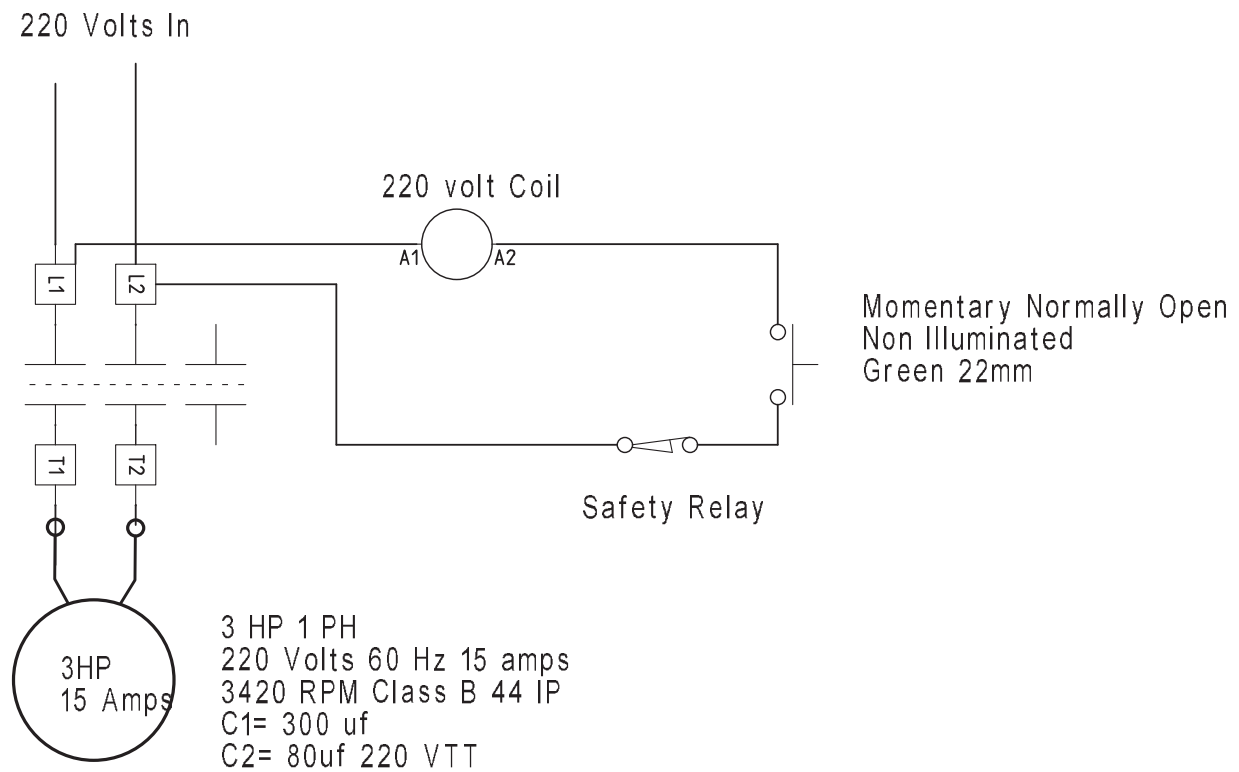
EXPLODED VIEW



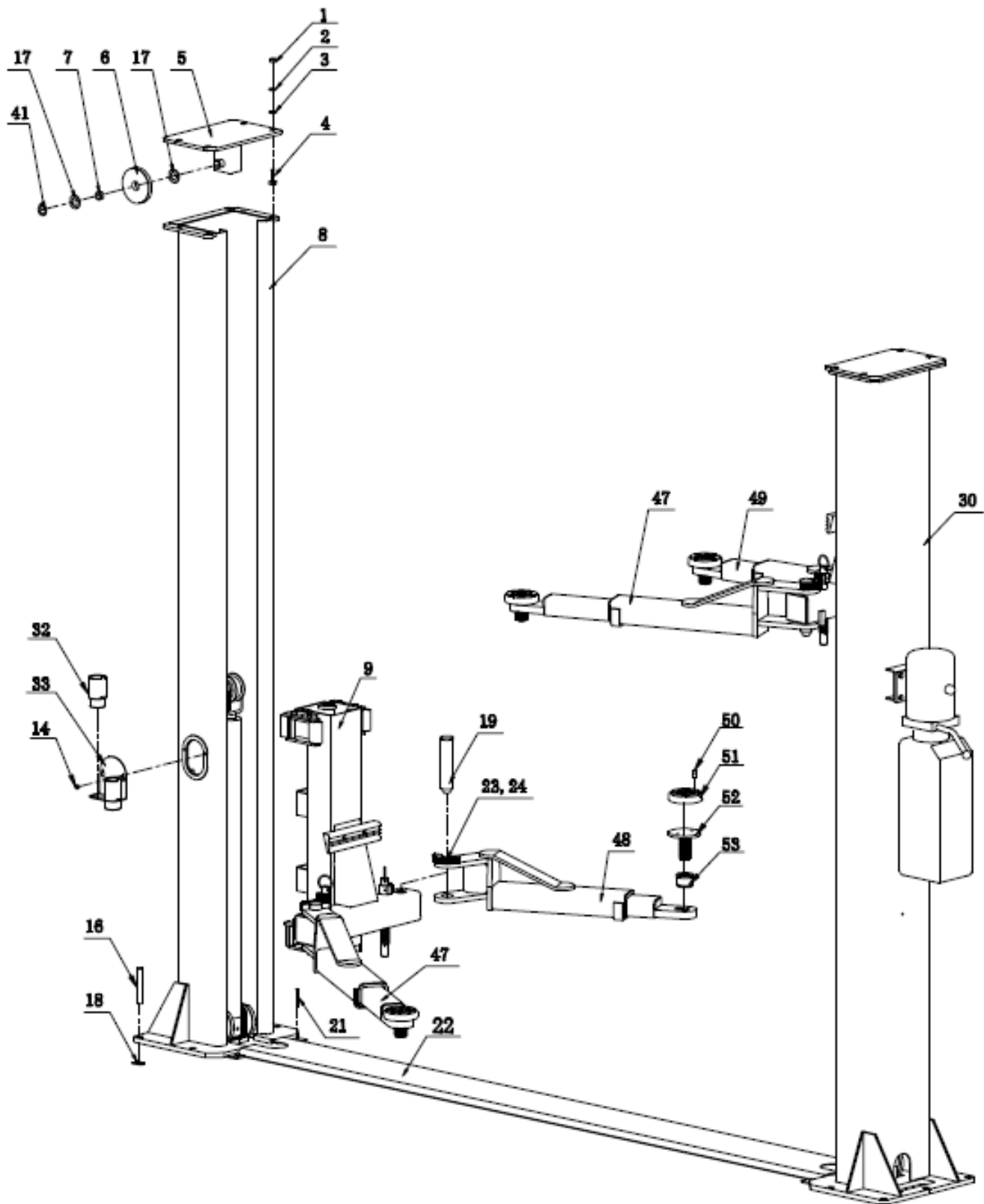
EXPLODED VIEW



WIRING DIAGRAM



EXPLODED VIEW



EAG9F PARTS LIST

ITEM	DRAWING	DESCRIPTION	QTY
1	GB6172-86-M12	Nut, M 12	8
2	GB93-87-12	Lock Washer M12	8
3	GB97.1-8512	Flat Washer M12	8
4	GB5782-86	Bolt ,Hex Head M12 x 40	8
5	NTPF-2100	Top Plate	2
6	BP-2002	Roller Sheave	2
7	52004A	Bushing	2
8	NTPF-1000B	Sub Column	1
9	NTPF-5210	Carriage	2
14	GB818-85	Pan Head Screw M6 x 8mm	5
16	M18 X 160	Anchor Bolt	10
17	30400-1005C	Washer	8
18	30400-1025	Spacer	10
19	NTPF-5005	Swing Arm Pin	4
15	QL40-000-05	Long joint (adapter A)	4
16	QL40-000-04	Short joint (adapter B)	4
17	QL40-200-03	Thin pulley	4
18	QL40-200-05	Sleeve bushing	4
19	GB5782-86	hexagon head bolt	4
21	M10 X 80	Expansion Bolt	4
22	NTPF-3000	FloorPlate	1
23	52042C	Moon Gear	4
24	GB5782-86	Socket Head Bolt , M10 x 16mm	12
30	NTPF-1000A	Main Column	1
31	NTPF-5220	Safety Lock Shaft	4

EAG9F PARTS LIST

32	LS-ZG-100	Pad Adapter	4
33	NTPF-1008	Adapter Holder	2
34	OH-1002	Cable Sheave	4
35	GB95-85-20	Flat Washer , M20	1
36	QL40-000-07	Right angle adjustable joint (fitting)	1
38	GB5782-86	Hexagon bolt M8x25	4
39	GB93-87	Spring washer 8	4
40	GB97.1-85	Flat washer 8	8
41	GB6170-86	Hexagon nuts M8	4
42	QL40-000-06	Hydraulic power units	1
43	QL40-000-01	Steel cable (cable)	2
44	GB97.1-85	Flat washer 20	4
45	GB6170-86	Hexagon nuts M20	8
47	GB70-85	Hexalobular socket cheese head screws	4
48	QL40-000-03	Pallet pad (rubber insert)	4
49	QL40-000-02	Pallet (lifting pad)	4
50	QL40-300-00	Straight arm of welding group	4
51	QL40-500-02	Extension spring	2
52	QL40-521-00	Insurance block welding group	2
45	GB5783-86	Hexagonal head bolt M20x50	2
46	QL40-500-03	Sleeve bushing	2
47	GB97.1-85	Flat washer 20	4
48	GB6170-86	Hexagon bolt M20	2
49	GB818-85	Cross recessed pan head screw M6x35	2
50	GB97.1-85	Flat washer 6	2
51	QL40-520-01	Compression spring	2
52	GB879-86	Elastic cylindrical pin	4
53	QL40-530-02	Compression spring	4
54	QL40-800-00	Bolt welding group	4
55	QL40-510-00	Slipway welding group(carriage)	2
56	QL40-000-15	Handle the ball M10	4

EAG9F PARTS LIST

57	QL40-530-01	Pull rod	4
58	GB6170-86	Hexagon bolt M10	4
59	GB93-87	Spring washer 10	4
60	GB97.1-85	Flat washer 10	8
61	QL40-530-04	Rack(gear rack)	4
62	QL40-530-03	Gear gasket	4
63	QL40-200-02	Dray chain(leaf chain)	2
64	QL40-500-01	Slide block (rubber block)	16
65	QL40-100-03	Rolled axle	2
66	QL40-100-02	Contact roller	2
67	QL40-100-04	Bearing hub	2
68	QL40-500-04	Steel wire rope(cable)	2
69	QL40-530-00	Rack - rod components	4
70	QL40-520-00	Insurance stopper blocks	2



CAUTION

Operator must stay away from lift area while the lift is being operated.

The lift can only be used in explosion-proof environment.

Only one person should operate the lift. Lifting a person is forbidden.

Please use No. 46 wearable hydraulic oil.

Concrete strength should be up to 3,000 PSI (207bar) ($>2.1\text{kg/mm}^2$)



EAGLE EQUIPMENT LIFT WARRANTY

Eagle Equipment warrants to the original retail purchaser of an Eagle Automotive Lift that it will replace without charge any part found under normal use, in the United States or Canada, to be defective in materials or workmanship, **for a period of ONE (1) YEAR FROM DATE OF PURCHASE**. Warranty covers parts only; purchaser is responsible for any and all labor requirements.

Exclusions:

This warranty will not apply to any machine:

1. Which has not been operated or maintained according to specifications
2. Which has been abused, misused, altered, or improperly maintained
3. Which has been improperly installed or assembled

Other limitations:

This warranty does not cover:

1. Parts needed for normal maintenance
2. Wear parts, which include but are not limited to: cables, hoses, slider blocks, chains and rubber pads
3. On-site labor

Eagle Equipment reserves the right to make improvements and/or design changes to its equipment without any obligation to previously sold, assembled or fabricated equipment.

There is no other express warranty on the Eagle Automotive Lift equipment and this warranty is exclusive of and in lieu of all other warranties, expressed or implied, including all warranties of merchantability and fitness for a particular purpose.

To the fullest extent allowed by law, Eagle Equipment shall not be liable for loss of use, inconvenience, lost time, commercial loss, or any other incidental or consequential damages.

Some states do not allow exclusion or limitation of consequential damages or how long an implied warranty lasts, so that the above limitations and exclusions may not apply. This warranty gives you specific legal rights and you may have other rights, which may vary from state to state.



Eagle Equipment, a division of **Standard Tools and Equipment Co.**, is a leading distributor of automotive repair and garage service equipment. Established in 1954, Eagle has provided quality equipment at competitive prices for 60 years. We carry a full line of automotive lifts: two-post lifts, four-post lifts, alignment lifts, scissor lifts, low-rise and mid-rise lifts, as well as models of movable service/storage lifts and our MOBILEMAN®. We also stock wheel service equipment including: wheel balancers, tire changers, and brake lathes. We offer a full line of parts, as well as technical support. Visit us at www.eagleequip.com.

NOTES

